```
Ak 4
chain nodes :
    13 14
             15
                  16
                      20
                           21
                               22
                                    43
                                        47
ring nodes :
              4
                  5
                     6
                        7
                            8
                               9
                                  10
                                       11
                                           12
                                                23
                                                     24
                                                         25
                                                              26
                                                                  27
                                                                       29
                                                                           30
                                                                                31
    1 2 3
                      37
        34
             35
                  36
                           38
                               39
                                    40
                                       50
                                            51
                                                 52
                                                      53
                                                          54
                                                               55
                                                                   57
                                                                        58
                                                                            59
                                                                                 61
                                                                                     62
    33
    63
        64
             65
                  66
                      67
                           68
                               69
chain bonds :
                                                20-21
                                                        21-22
                                                                22-47
    2-13 5-14
                  9-20
                                14-15
                                        14-16
                        12-13
ring bonds :
    1-2 1-6
               2-3
                    3 - 4
                           4-5
                                5-6 7-8
                                           7-12
                                                  8 - 9
                                                        9-10
                                                               10-11
                                                                       11-12
                                                                              23-24
    23-27
            24-25
                    25-26
                            26-27
                                    29-30
                                           29-34
                                                    30 - 31
                                                           31 - 32
                                                                   32-33
                                                                           33-34
                                                                                   35-36
    35 - 40
            36-37
                    37-38
                            38 - 39
                                    39-40
                                            50 - 51
                                                    50 - 55
                                                           51-52
                                                                   52 - 53
                                                                           53-54 54-55
    57-58
            57-59
                    58-59
                            61-62
                                    61-66
                                            62-63
                                                    63-64
                                                           64-65
                                                                   64 - 67
                                                                           65-66
                                                                                   65-69
    67-68
            68-69
exact/norm bonds :
    1-2 1-6 2-3
                    2-13
                            3 - 4
                                 4-5 5-6
                                            5-14
                                                    7-8
                                                         7-12
                                                               8-9 9-10
                                                                            9-20
                                                                                   10-11
    11-12
            12-13
                    14 - 15
                            14-16
                                    20-21
                                            21-22
                                                    22-47
                                                           23-24
                                                                   23-27
                                                                           24 - 25
                                                                                   25-26
    26-27
            35-36
                    35 - 40
                            36-37
                                    37 - 38
                                            38 - 39
                                                    39 - 40
                                                           57-58
                                                                   57-59
                                                                           58-59
                                                                                   64 - 67
            67-68
    65-69
                    68-69
normalized bonds :
    29-30
                    30-31
                            31-32
                                    32-33
                                            33 - 34
                                                    50÷51
                                                           50-55
                                                                   51-52
                                                                           52-53
                                                                                   53-54
            29-34
    54-55
            61-62
                   61-66
                            62-63
                                    63-64
                                            64-65
                                                    65-66
isolated ring systems :
    containing 1:7:23:
G1:C, N
G2:[*1],[*2],[*3],[*4]
Connectivity:
    43:1 E exact RC ring/chain
Match level :
    1:Atom 2:Atom
                      3:Atom
                              4:Atom
                                        5:Atom
                                                 6:Atom
                                                          7:Atom
                                                                   8:Atom
                                                                            9:Atom
```

10:Atom

C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\rtraaaxtr.str

11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 20:CLASS 21:CLASS 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 43:CLASS 47:CLASS 50:Atom 51:Atom 52:Atom 53:Atom 54:Atom 55:Atom 57:Atom 58:Atom 59:Atom 61:Atom 62:Atom 63:Atom 64:Atom 65:Atom 66:Atom 67:Atom 68:Atom 69:Atom

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```
Welcome to STN International! Enter x:x
LOGINID:ssspta1612bxr
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
                      Welcome to STN International
                  Web Page URLs for STN Seminar Schedule - N. America
 NEWS
      1
                  "Ask CAS" for self-help around the clock
 NEWS
      2
                  The Derwent World Patents Index suite of databases on STN
 NEWS
         OCT 23
                  has been enhanced and reloaded
                  CHEMLIST enhanced with new search and display field
 NEWS
          OCT 30
          NOV 03
                  JAPIO enhanced with IPC 8 features and functionality
 NEWS
       5
          NOV 10
                  CA/CAplus F-Term thesaurus enhanced
 NEWS
       6
 NEWS
          NOV 10
                  STN Express with Discover! free maintenance release Version
                  8.01c now available
                  CA/CAplus to MARPAT accession number crossover limit increased
 NEWS
      8
          NOV 20
                  to 50,000
 NEWS 9
          DEC 01
                  CAS REGISTRY updated with new ambiguity codes
 NEWS 10
          DEC 11
                  CAS REGISTRY chemical nomenclature enhanced
 NEWS 11
          DEC 14
                  WPIDS/WPINDEX/WPIX manual codes updated
                  GBFULL and FRFULL enhanced with IPC 8 features and
 NEWS 12
          DEC 14
                  functionality
 NEWS 13
          DEC 18
                  CA/CAplus pre-1967 chemical substance index entries enhanced
                  with preparation role
 NEWS 14
          DEC 18
                  CA/CAplus patent kind codes updated
          DEC 18
 NEWS 15
                  MARPAT to CA/Caplus accession number crossover limit increased
                  to 50,000
          DEC 18
 NEWS 16
                  MEDLINE updated in preparation for 2007 reload
          DEC 27
 NEWS 17
                  CA/CAplus enhanced with more pre-1907 records
          JAN 08
                  CHEMLIST enhanced with New Zealand Inventory of Chemicals
 NEWS 18
 NEWS 19
                  CA/CAplus Company Name Thesaurus enhanced and reloaded
          JAN 16
 NEWS 20
          JAN 16
                  IPC version 2007.01 thesaurus available on STN
 NEWS 21
          JAN 16
                  WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
 NEWS 22
          JAN 22
                  CA/CAplus updated with revised CAS roles
 NEWS 23
          JAN 22
                  CA/CAplus enhanced with patent applications from India
 NEWS 24
          JAN 29
                  PHAR reloaded with new search and display fields
                  CAS Registry Number crossover limit increased to 300,000 in
 NEWS 25
          JAN 29
                  multiple databases
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
 NEWS EXPRESS
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(jP),
               AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
```

Enter NEWS followed by the item number or name to see news on that

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STN Operating Hours Plus Help Desk Availability

X.25 communication option no longer available

For general information regarding STN implementation of IPC 8

NEWS HOURS

NEWS LOGIN

NEWS IPC8

NEWS X25

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=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
1.05 1.05

FULL ESTIMATED COST

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=> Uploading C:\Documents and Settings\brobinson1\My Documents\stnweb\Queries\121298.str

L1 STRUCTURE UPLOADED

=> s 11
SAMPLE SEARCH INITIATED 13:13:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3245 TO ITERATE

61.6% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

39 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 61484 TO 68316

Updated Search

PROJECTED ANSWERS:

788 TO 1742

L2

39 SEA SSS SAM L1

=> s 11 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 171.65 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 13:13:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 65772 TO ITERATE

100.0% PROCESSED 65772 ITERATIONS

1207 ANSWERS

SEARCH TIME: 00.00.01

L3 1207 SEA SSS FUL L1

=> file hcaplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 172.10 173.15

FULL ESTIMATED COST

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=> s 13 L4 181 L3

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.60 175.75

FULL ESTIMATED COST

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31 JAN 2007 HIGHEST RN 918932-71-5 STRUCTURE FILE UPDATES: DICTIONARY FILE UPDATES: 31 JAN 2007 HIGHEST RN 918932-71-5

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=> s 14

L5 1207 L3

=> .

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STRUCTURE UPLOADED 1.6

=> s 16

SAMPLE SEARCH INITIATED 13:22:25 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -445 TO ITERATE

100.0% PROCESSED

445 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

COMPLETE ONLINE

COMPLETE BATCH

PROJECTED ITERATIONS:

7635 TO 10165

PROJECTED ANSWERS:

0 TO 0

L7

0 SEA SSS SAM L6

=> s 16 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 171.65 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N or END:y FULL SEARCH INITIATED 13:22:29 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 8421 TO ITERATE

8421 ITERATIONS 100.0% PROCESSED

O ANSWERS

SEARCH TIME: 00.00.01

O SEA SSS FUL L6

chain nodes : 23 . 27 16 13 14 15 ring nodes : 9 10 11 1 2 3 4 8 chain bonds : 14-15 14-16 20-21 21-22 2-13 5-14 9-20 12-13 ring bonds : 8-9 9-10 10-11 11-12 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 exact/norm bonds : 1-2 1-6 2-3 2-13 3-4 4-5 5-6 5-14 7-8 7-12 8-9 9-10 9-20 10-11 11-12 12-13 14-15 14-16 20-21 21-22 22-27 isolated ring systems : containing 1 : 7 : G1:C, N

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 20:CLASS

G2:Cy,[*1]

Connectivity:

Match level :

23:1 E exact RC ring/chain

21:CLASS 22:CLASS 23:CLASS 27:CLASS

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```
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LOGINID:ssspta1612bxr

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
     1
                 "Ask CAS" for self-help around the clock
     2
NEWS
                 The Derwent World Patents Index suite of databases on STN
NEWS
     3
        OCT 23
                 has been enhanced and reloaded
                 CHEMLIST enhanced with new search and display field
NEWS
         OCT 30
     4
                 JAPIO enhanced with IPC 8 features and functionality
NEWS
     5
         NOV 03
                 CA/CAplus F-Term thesaurus enhanced
NEWS
      6
         NOV 10
                 STN Express with Discover! free maintenance release Version
         NOV 10
NEWS
     7
                 8.01c now available
                 CA/CAplus to MARPAT accession number crossover limit increased
NEWS
     8
         NOV 20
                 to 50,000
         DEC 01
                 CAS REGISTRY updated with new ambiguity codes
NEWS 9
         DEC 11
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 10
NEWS 11
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
                 GBFULL and FRFULL enhanced with IPC 8 features and
         DEC 14
NEWS 12
                 functionality
                 CA/CAplus pre-1967 chemical substance index entries enhanced
NEWS 13
         DEC 18
                 with preparation role
NEWS 14
         DEC 18
                 CA/CAplus patent kind codes updated
                 MARPAT to CA/CAplus accession number crossover limit increased
NEWS 15
         DEC 18
                 MEDLINE updated in preparation for 2007 reload
NEWS 16
         DEC 18
NEWS 17
         DEC 27
                 CA/CAplus enhanced with more pre-1907 records
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 18
         JAN 08
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 19
         JAN 16
NEWS 20
                 IPC version 2007.01 thesaurus available on STN
         JAN 16
NEWS 21
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
                 CA/CAplus updated with revised CAS roles
NEWS 22
         JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS 23
         JAN 22
                 PHAR reloaded with new search and display fields
NEWS 24
         JAN 29
                 CAS Registry Number crossover limit increased to 300,000 in
NEWS 25
         JAN 29
                 multiple databases
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
              STN Operating Hours Plus Help Desk Availability
NEWS HOURS
              Welcome Banner and News Items
NEWS LOGIN
              For general information regarding STN implementation of IPC 8
NEWS IPC8
              X.25 communication option no longer available
NEWS X25
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=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 1.05 1.05

FULL ESTIMATED COST

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STRUCTURE UPLOADED 1.1

=> s l1 SAMPLE SEARCH INITIATED 13:13:43 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -3245 TO ITERATE

2000 ITERATIONS 61.6% PROCESSED INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

39 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

> **COMPLETE** BATCH

PROJECTED ITERATIONS: 61484 TO

PROJECTED ANSWERS:

788 TO 1742

39 SEA SSS SAM L1

=> s 11 full THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 171.65 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N or END:y FULL SEARCH INITIATED 13:13:48 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -65772 TO ITERATE

100.0% PROCESSED 65772 ITERATIONS 1207 ANSWERS

SEARCH TIME: 00.00.01

1207 SEA SSS FUL L1 L3

=> file hcaplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 173.15 172.10

FULL ESTIMATED COST

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=> s 13181 L3 L4

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.60 175.75

FULL ESTIMATED COST

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=> s 14

1207 L3 L5

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STRUCTURE UPLOADED L6

=> s 16

SAMPLE SEARCH INITIATED 13:22:25 FILE 'REGISTRY' 445 TO ITERATE SAMPLE SCREEN SEARCH COMPLETED -

100.0% PROCESSED

445 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

COMPLETE FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH PROJECTED ITERATIONS: 7635 TO 10165 PROJECTED ANSWERS: 0 TO

L7

O SEA SSS SAM L6

=> s 16 full THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 171.65 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N or END:y FULL SEARCH INITIATED 13:22:29 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -8421 TO ITERATE

100.0% PROCESSED 8421 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L8 O SEA SSS FUL L6

=>

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L9 STRUCTURE UPLOADED

=> s 19

Updated Search

SAMPLE SEARCH INITIATED 13:25:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2933 TO ITERATE

68.2% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

0 ANSWERS

·

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 55412 TO 61908
PROJECTED ANSWERS: 0 TO

L10 0 SEA SSS SAM L9

=> s 19 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 171.65 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 13:25:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 59572 TO ITERATE

100.0% PROCESSED 59572 ITERATIONS

13 ANSWERS

SEARCH TIME: 00.00.02

L11 13 SEA SSS FUL L9

=> file hcaplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 351.85 527.60

FULL ESTIMATED COST

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=> s 111 L12

L12 5 L11 => d l12, ibib abs hitstr, 1-5

L12 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

2005:588876 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 143:115448

Nicotinamide derivatives preparation as opioid TITLE:

receptor antagonists

Benesh, Dana Rae; Blanco-Pillado, Maria-Jesus INVENTOR(S):

Eli Lilly and Company, USA PATENT ASSIGNEE(S): PCT Int. Appl., 61 pp. SOURCE:

CODEN: PIXXD2 -

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | TENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|---------|-------|-------|-----|-----|-----|-----|------|------|-----|------|------|--------------|------|-----|-----|------|-----|
| WO | 2005 | 0614 | 42 | | A1 | _ | 2005 | 0707 | | WO 2 | 004- | US38: | 227 | | 2 | 0041 | 206 |
| | W:. | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, |
| | | | | | | | DE, | | | | | | | | | | |
| | | | | | | | ID, | | | | | | | | | | |
| | | | | | | | LV, | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | |
| • | DW. | | | | | | MW, | | | | | | | | | | |
| | KW: | | | | | | | | | | | | | | | | |
| | | | | | | | RU, | | | | | | | | | | |
| | | | | | | | GR, | | | | | | | | | | |
| | | | - | | | | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | MT, |
| | | | | SN, | | | | | | · | | - | | | | | |
| | 2004 | | | | | | | | | | | | | | | | |
| | 2549 | | | | | | | | | | | | | | | | |
| EP | 1697 | | | | | | | | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | FI, | RO, | CY, | TR, | BG, | CZ, | EE, | ΗU, | PL, | SK, | IS | | |
| CN | 1890 | 208 | | | A | | 2007 | 0103 | | CN 2 | 004- | 8003 | 6471 | | 2 | 0041 | 206 |
| US | 2007 | | | | | | | | | | | | | | | | |
| PRIORIT | | | | | | | | | | US 2 | 003- | 5290 | 61P | | P 2 | 0031 | 212 |
| | | | | | | | | | | WO 2 | 004- | US38 | 227 | | W 2 | 0041 | 206 |
| OTHER S | OURCE | (S) : | | | MAR | РАТ | 143: | 1154 | | | | | | | _ | | • |
| GI | | , . | | | | | | | | | • | | | | | | |

Nicotinamide derivs. were prepd.for use in the treatment, prevention or AΒ amelioration of obesity and related diseases. E.g., I was prepared starting from 3,3-dimethyl-1,5-dioxaspiro[5.5]undecan-9-one through a number of reaction sequences. I and a number of other derivs. were tested with the GTP- γ -S binding assay and ex vivo receptor binding.

Ι

857048-52-3P 857048-53-4P 857048-54-5P IT

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(nicotinamide derivs. preparation as opioid receptor antagonists)

RN 857048-52-3 HCAPLUS

CN 3-Pyridinecarboxamide, 6-[[4-[[2-(tetrahydro-2H-pyran-4-yl)ethyl]amino]cyclohexyl]oxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 857048-53-4 HCAPLUS

CN 3-Pyridinecarboxamide, 6-[[4-[(3-methylbutyl)amino]cyclohexyl]oxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ H_2N-C & \\ \hline \end{array} \\ NH-CH_2-CH_2-CHMe_2$$

RN 857048-54-5 HCAPLUS

CN 3-Pyridinecarboxamide, 6-[[4-[[2-(2-thienyl)ethyl]amino]cyclohexyl]oxy](9CI) (CA INDEX NAME)

RN 857048-55-6 HCAPLUS

CN Benzamide, 4-[[4-[(3-phenylpropyl)amino]cyclohexyl]oxy]- (9CI) (CA INDEX NAME)

IT 857048-56-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(nicotinamide derivs. preparation as opioid receptor antagonists)

RN 857048-56-7 HCAPLUS

3-Pyridinecarboxamide, 6-[[trans-4-[(phenylmethyl)amino]cyclohexyl]oxy]-CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$H_2N$$
 N
 O
 H
 N
 O
 Ph

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS 12 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:570983 HCAPLUS

DOCUMENT NUMBER:

143:97274

TITLE:

Preparation of piperidines as chemokine receptor,

particularly CCR5, modulators for treatment of

inflammatory and autoimmune diseases

INVENTOR(S):

Bridger, Gary J.; Zhou, Yuanxi; Skerlj, Renato Anormed Inc., Can.

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 384 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| | rent | | | | KIN | D | DATE | | I | APPL: | ICAT: | ION ,i | NO. | | Di | ATE | |
|----------|--------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| WO | 2005 2005 | 0591 | 07 | | | | | | 1 | WO 2 | 004-1 | JS41 | 365 | | 2 | 0041 | 213 |
| | ₩: | CN, GE, LK, | CO, GH, LR, | CR, GM, LS, | CU, HR, LT, | CZ, HU, LU, | AU, DE, ID, LV, PL, | DK, IL, MA, | DM, IN, MD, | DZ, IS, MG, | EC, JP, MK, | EE, KE, MN, | EG, KG, MW, | ES, KP, MX, | FI, KR, MZ, | GB, KZ, NA, | GD, LC, NI, |
| | RW: | TJ, BW, AZ, EE, RO, | TM, GH, BY, ES, SE, | TN, GM, KG, FI, SI, | TR, KE, KZ, FR, SK, | TT, LS, MD, GB, TR, | TZ, MW, RU, GR, BF, | UA, MZ, TJ, HU, | UG, NA, TM, IE, | US, SD, AT, IS, | UZ, SL, BE, IT, | VC, SZ, BG, LT, | VN, TZ, CH, LU, | YU, UG, CY, MC, | ZA, ZM, CZ, NL, | ZM, ZW, DE, PL, | ZW AM, DK, PT, |
| | 2548 1708 R: | 393 703 AT, IE, | BE, | CH, | A1 A2 DE, LV, | DK, FI, | 2005 2006 ES, RO, | 1011 FR, | GB, CY, | GR, AL, | 004- IT, TR, | B140 LI, BG, | 91 LU, CZ, | NL, EE, | SE, HU, | 0041: MC, PL, | 213 PT, SK, |
| OTHER SO | | LN. | INFO | . : | | | | 9727 | 1 | | | | | 1 | | 0031; 0041; | |

GI

$$R^2$$
 Y X R^3 H N H R^1 Me O I

AB Title compds. I [wherein X = C, N; Y = O if X = C, or a bond if X = N; Z = (CH2)n; n = 0-1; R1 = (un)substituted hetero/aryl; R2 = (un)substituted hetero/aryl, N:(alkyl); R3 = (un)substituted hetero/aryl, or a Ph fused with a 5- or 6-membered heterocycle; R4 = H, alkyl; and their pharmaceutically acceptable salts] were prepared as chemokine receptor, particularly CCR5, modulators for treatment of inflammatory and autoimmune diseases. For example, coupling of 2,4-dimethyl-N-oxonicotinic acid with [3-[4-[(4-bromophenyl)phenoxymethyl]piperidin-1-yl]butyl]amine (preparation given) gave II in 82% yield. I exhibited IC50's in the range of 0.01 nM to 50 μM in an assay for inhibition of HIV-1 using PMBC and R5. Compds. I demonstrate protective effects against infection of target cells by a human immunodeficiency virus (HIV).

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CCR5 modulator; preparation of piperidines as chemokine receptor modulators for treatment of inflammatory and autoimmune diseases)

RN 856937-05-8 HCAPLUS

CN 5-Pyrimidinecarboxamide, N-[(3R)-3-[4-[[4-[4-(aminocarbonyl)phenoxy]phenyl](3-thienylmethyl)amino]-1-piperidinyl]butyl]-4,6-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:309175 HCAPLUS

DOCUMENT NUMBER:

143:90722

TITLE:

Metabotropic glutamate 2 receptor potentiators: receptor modulation, frequency-dependent synaptic activity, and efficacy in preclinical anxiety and

psychosis model(s)

AUTHOR(S):

Johnson, Michael P.; Barda, David; Britton, Thomas C.; Emkey, Renee; Hornback, William J.; Jagdmann, G. Erik;

McKinzie, David L.; Nisenbaum, Eric S.; Tizzano,

Joseph P.; Schoepp, Darryle D.

CORPORATE SOURCE:

Lilly Research Laboratories, Lilly Corp. Cent., Eli

Lilly and Company, IN, 46285, USA

SOURCE:

Psychopharmacology (Berlin, Germany) (2005), 179(1),

271-283

CODEN: PSCHDL; ISSN: 0033-3158

PUBLISHER: Springer GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

To increase subtype selectivity and provide a novel means to alter receptor function, the authors discovered and characterization potentiators for the metabotropic glutamate 2 receptor (mGlu2). A class of 3-pyridylmethylsulfonamides (e.g., 3-MPPTS; 2,2,2-trifluoro-N-[3-(2methoxyphenoxy)phenyl]-N-(3-pyridinylmethyl)-ethanesulfonamide) were found to be potent, subtype-selective potentiators of human and rat mGlu2. The sulfonamides increased agonist potency in functional assays but did not displace orthosteric radiolabeled antagonist or agonist binding to cloned mGlu2 receptors. Rather, the modulators increased the affinity of most of the orthosteric agonists including glutamate, DCG-IV ((2S,2'R,3'R)-2-(2',3'-dicarboxylcyclopropyl)glycine), and LY354740 (1S,2S,5R,6S-2aminobicyclo[3.1.0]hexane-2,6-bicarboxylate monohydrate). In striatal brain slices, LY354740 inhibited evoked excitatory postsynaptic potentials (EPSPs) equally well following either a low- (0.06 Hz) or high (4 Hz)-frequency stimulation of corticostriatal afferents. In contrast, the mGlu2 potentiator cyPPTS (2,2,2-trifluoro-N-[3-(cyclopentyloxy)phenyl]-N-(3-pyridinylmethyl)-ethanesulfonamide) inhibited striatal EPSPs only at higher frequencies of stimulation (2 and 4 Hz). Several sulfonamides including 4-MPPTS, 4-APPES (N-[4-(4-carboxamidophenoxy)phenyl]-N-(3pyridinylmethyl)-ethanesulfonamide hydrochloride monohydrate), and/or

CBiPES (N-[4'-cyano-biphenyl-3-yl]-N-(3-pyridinylmethyl)-ethanesulfonamide hydrochloride) were tested in mGlu2/3 agonist-sensitive rodent model(s) of anxiety and psychosis. As seen with LY354740, both 4-MPPTS and 4-APPES were efficacious in a rat fear-potentiated startle paradigm. Likewise in mice, CBiPES attenuated a stress-induced hyperthermia and PCP-induced hyperlocomotor activity. Furthermore, CBiPES mediated alteration in PCP-induced hyperlocomotor activity was sensitive to mGlu2/3 antagonist pretreatment. Taken together, the data indicate mGlu2 receptor potentiators have a unique use-dependent effect on presynaptic glutamate release, and show efficacy in several mGlu2/3-sensitive animal models of psychiatric disorders.

IT 856702-39-1

CN

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mGlu2 receptor potentiators on presynaptic glutamate release in preclin. anxiety and psychosis models)

856702-39-1 HCAPLUS RN

Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

REFERENCE COUNT:

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS . 53 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L12 ANSWER 4 OF 5

ACCESSION NUMBER:

2004:267241 HCAPLUS

DOCUMENT NUMBER:

140:303538

TITLE:

Preparation of [[(aminoalkyl)aryl]oxy]nicotinamides and analogs as opioid receptor antagonist for

treatment of obesity and related conditions

INVENTOR(S): Blanco-Pillado, Maria-Jesus; Chappell, Mark Donald;

Garcia De la Torre, Marta; Diaz Buezo, Nuria; Fritz, James Erwin; Holloway, William Glen; Matt, James Edward, Jr.; Mitch, Charles Howard; Pedregal-Tercero,

Concepcion; Quimby, Steven James; Siegel, Miles Goodman; Smith, Dana Rae; Stucky, Russell Dean;

Takeuchi, Kumiko; Thomas, Elizabeth Marie; Wolfe, Chad

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA PCT Int. Appl., 559 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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PATENT INFORMATION:

| PA | ATENT | NO. | • | | KIN | D | DATE | | ٠ | | | | NO. | | D | ATE | |
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| | 2004 | 0263 | 05 | | A1 | | 2004 | 0401 | | | 2003- | | 300 | | 2 | 0030 | 917 |
| WC | 2004 | | | | | | | | | | 20 | 22 | D.V | D.O | ~ 7 | CI. | CN |
| | ₩: | | | | | | | | | | , BG, | | | | | | |
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| | | LR, | LS, | LT, | LU, | LV | MA, | MD, | MG, | MK | , MN, | MW, | MX, | ΜZ, | NI, | NO, | ΝZ, |
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| | RW: | GH, | GM, | KE, | LS, | MW | MZ, | SD, | SL, | SZ | , TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
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| CA | A 2499 | | | | | | | | | | | | | | | | |
| 10 | J 2003 | 2699 | 80 | | Δ1 | | 2004 | 0408 | | AII | 2003- | 2699 | 80 | | 2 | 0030 | 917 |
| ום | 2003 | 01/13 | N S | | Δ | | 2005 | 0705 | | BR : | 2003- | 1430 | 8 | | 2 | 0030 | 917 |
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| CI | 1681 2006 | 490 | 71 | | A. | | 2005 | 1012 | | TD ' | 2003- | 5276 | 6.3 4.T | | 2 | 0020 | 017 |
| J I | 2000 | 2114 | 74 | | 71.7 | | 2006 | 0400 | | UP . | 2004- | 5370 | 62 60 | | 2 | 0030 | 3U3 |
| | 2006 2005 | 21/3 | 12 | | AI | | 2006 | 0920 | | 05 | 2005- | 2209 | 7 | | 2 | 0050 | 303 |
| 7.0 | V 2005 | KNUU | 45/ | | A | | 2006 | 0303 | | TW. | 2005- | KN45 | / | | 2 | 0050 | 318 |
| | 2005 | | | | Α | | 2005 | 0418 | | NO . | 2005- | 18/1 | | | _ 2 | 0050 | 418 |
| PRIORIT | IY APP | LN. | INFO | .: | | | | | | US | 2002- | 4121 | 58P | | P 2 | | |
| | | | | | | | | | | WO : | 2003- | US26 | 300 | 1 | w 2 | 0030 | 917 |
| OTHER S | SOURCE | (S): | | | MAR | PAT | 140: | 3035 | 38 | | | | | | | | |
| GI | | | | | | | | | | | | | | | | | |

Me
$$NH_2$$
 NH_2 NH_2

AB Title diaryl ethers I [wherein X1-X10 = independently C, CH, or N; provided that each of rings A or B has no more than 2 N atoms; E = O or

Ι

NH; R1 and R2 = independently H or (un) substituted (cyclo) alkyl, alkenyl, alkynyl, (alkyl)aryl, (aryl)heterocyclyl, (cyclo)alkylheterocyclyl, (cyclo)alkanoylalkyl, aroylalkyl, aryloxyalkyl, benzhydryl, bicyclyl(alkyl), benzoyl(alkyl), alkoxyalkyl, alkoxycarbonyl, (aryl)alkylsulfonyl, heterocyclylalkylsulfonyl, cycloalkylalkyl, carboxyalkyl, carbamoylalkyl, etc.; R3 and R3' = independently H, alkyl, alkenyl, alkynyl, (alkyl)aryl, or alkylcycloalkyl; R4 and R5 = independently H, (halo)alkyl, alkenyl, alkynyl, alkoxy(halo)alkyl, thioalkyl, halo, aryl(alkyl), alkanoyl, alkoxycarbonyl, aminoalkyl, cycloalkylalkyl, etc.; R6 and R7 = independently H, (cyclo)alkyl, alkenyl, alkynyl, alkanoyl, OH, alkoxy, (aryl)alkylsulfonyl, heterocyclylalkylsulfonyl, aryl(alkyl), carbamoyl(alkyl), etc.; m = 1-3; n = 0-3; p = 0-3; or pharmaceutically acceptable salts, solvates, enantiomers, racemates, diastereomers, or mixts. thereof] were prepared as $\mu^-, \kappa^-,$ and δ -opioid receptor antagonists. For example, reductive amination of 6-(2-fluoro-4-formylphenoxy)nicotinamide and 3-methylbutylamine provided II (99%). The latter inhibited ex vivo binding of [3H]-diprenorphine in rat striatum/nucleus accumbens by >65% at a concentration of 7 mg/kg. In an acute feeding rat obesity assay, II suppressed

opioid receptors at a dose of 0.3 $\mu g/kg$. In addition, diet-induced obese rats achieved an energy balance (caloric intake minus utilization) of -81 kcal/kg/day upon administration of 0.3 mg/kg p.o. of II in an indirect calorimetry assay. Thus, I and their pharmaceutical compns. are useful for the treatment, prevention, or amelioration of obesity and related diseases.

IT 676495-22-0P, 4-[4-(3-Phenylpropylamino)phenoxy]benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(opioid receptor antagonist; preparation of (aryloxy)nicotinamides and analogs as opioid receptor antagonist for treatment of obesity and related conditions)

RN 676495-22-0 HCAPLUS

CN Benzamide, 4-[4-[(3-phenylpropyl)amino]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:581845 HCAPLUS

DOCUMENT NUMBER: 135:152723

TITLE: Preparation of N-phenyl-N-

alkylsulfonyl(pyridylmethyl)amines as potentiators of

glutamate receptors

INVENTOR(S): Coleman, Darrell Stephen; Jagdmann, Gunnar Erik

Junior; Johnson, Kirk Willis; Johnson, Michael Parvin; Large, Thomas Hallett; Monn, James Allen; Schoepp, Darryle Darwin; Tizzano, Joseph Patrick; Barda, David Anthony; Britton, Thomas Charles; Dressman, Bruce Anthony; Fichtner, Michael William; Henry, Steven

Scott; Hornback, William Joseph

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

GI

PCT Int. Appl., 247 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT | NO. | | KIND | DAT | E | 4 | APPL: | ICAT: | ON 1 | . 00 | | D | ATE | |
|--------------|--|---------------------------------|---|--|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | .056990 .056990 | | | | | 1 | WO 20 | 001- | JS64: | 3 | | 2 | 0010 | 122 |
| | AE, AG, CR, CU, HU, ID, LU, LV, SD, SE, YU, ZA, | AL, CZ, IL, MA, SG, | AM, ADE, IIIIN, IIIN, IIIN, IIIN, IIIN, IIIIN, IIII | AT, AU DK, DM IS, JF MG, MK SK, SI | , AZ, , DZ, , KE, , MN, , TJ, | EE, KG, MW, TM, | ES, KP, MX, TR, | FI, KR, MZ, TT, | GB, KZ, NO, TZ, | GD, LC, NZ, UA, | GE, LK, PL, UG, | GH, LR, PT, US, | GM, LS, RO, UZ, | HR, LT, RU, VN, |
| | CI, CM, GH, GM, DE, DK, BJ, CF, | KE, ES, CG, | LS, N FI, N CI, O | MW, MZ FR, GE CM, GA | , SD, , GR, , GN, | SL, IE, GW, | SZ, IT, ML, | TZ, LU, MR, | UG, MC, NE, | NL, SN, | PT, TD, | SE, TG | TR, | BF, |
| R: | AT, BE, IE, SI, | CH, LT, | DE, I | DK, ES FI, RC | , FR, , MK, | GB, CY, | GR, AL, | IT, TR | LI, | LU, | NL, | SE, | MC, | PT, |
| | 1006114)651 | | | | | | | | | | | | | |
| PRIORITY AP | PLN. INFC |).: | | | | | US 20 US 20 WO 20 | 000- | 1800 | 89P | | P 2 | 0000: 0000: 0010 | 203 |
| OTHER SOURCE | E(S): | | MARPA | AT 135 | :1527 | 23 | | | | | | | | |

$$R6$$
 N
 $R1$
 $R2$

The title compds. [I; R1 = COR3, CO2R4, SO2R5 (wherein R3 = alkyl, cycloalkyl; R4 = alkyl, cycloalkyl; R5 = alkyl, cycloalkyl, fluorinated alkyl); R2 = H, OH, alkyl, etc.; or two R2 are taken together, on adjacent

ΙT

CN

position, to form a fused cycloalkyl or methylenedioxy ring; R6 = H, alkyl, alkoxy, etc.; X = a bond, CH2, (CH2)2, CH(alkyl); Y = a bond, CH2, (CH2)2, etc.] and their pharmaceutically acceptable salts which are potentiators of metabotropic glutamate receptor function, in particular mGlu2 and/or mGlu3 receptors, and therefore useful in treating migraine, anxiety, epilepsy and schizophrenia, were prepared and formulated. Thus, reductive alkylation of 3-(2-methoxyphenoxy) aniline (preparation given) with pyridine-3-carboxaldehyde in the presence of NaBH4 followed by alkylation of the resulting N-[3-(2-methoxyphenoxy) phenyl]pyrid-3-methylamine with F3CCH2SO2Cl afforded the amine II which showed to act at a site other than the glutamate recognition site to potentiate the effects of glutamate at mGlu receptors (data given).

353233-13-3P 353234-76-1P 353235-43-5P

353235-49-1P 353237-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-phenyl-N-alkylsulfonyl(pyridylmethyl)amines as potentiators of glutamate receptors)

RN 353233-13-3 HCAPLUS

Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-, hydrochloride (10:11) (9CI) (CA INDEX NAME)

●11/10 HCl

RN 353234-76-1 HCAPLUS

CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-3-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

$$O = S - Et$$

$$O = N - CH_2$$

$$H_2N - C$$

$$O = S - Et$$

$$N - CH_2$$

● HCl

RN 353235-43-5 HCAPLUS CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]- (9CI) (CA INDEX NAME)

RN 353235-49-1 HCAPLUS
CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-3-fluoro(9CI) (CA INDEX NAME)

$$O = S - Et$$

$$N - CH_2 - N$$

$$0 = S - Et$$

$$N - CH_2 - N$$

RN 353237-68-0 HCAPLUS
CN Benzamide, 3-fluoro-4-[4-[(3-pyridinylmethyl)]((2,2,2-trifluoroethyl)sulfonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

$$O = S - CH_2 - CF_3$$

$$N - CH_2 - N$$

$$H_2N - C$$

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FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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FILE 'REGISTRY' ENTERED AT 13:13:16 ON 01 FEB 2007

L1 STRUCTURE UPLOADED

L2 39 S L1

L3 1207 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 13:13:50 ON 01 FEB 2007 L4 181 S L3

FILE 'REGISTRY' ENTERED AT 13:13:57 ON 01 FEB 2007 L5 1207 S L4

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STRUCTURE UPLOADED 0 S L6
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    FILE 'HCAPLUS' ENTERED AT 13:25:17 ON 01 FEB 2007
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chain nodes :
             16 20
  13 14 15
                     21
ring nodes :
                         9 10 11
   1 2 3 4
                      8
chain bonds :
                         14-15 14-16 20-21
   2-13 5-14
              9-20 12-13
ring bonds :
   1-2 1-6 2-3 3-4
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exact/norm bonds :
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   11-12 12-13 14-15 14-16 20-21
isolated ring systems :
   containing 1 : 7 :
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Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 20:CLASS 21:CLASS

G1:C,N

G2:Cy

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STRUCTURE FILE UPDATES: 31 JAN 2007 HIGHEST RN 918932-71-5 DICTIONARY FILE UPDATES: 31 JAN 2007 HIGHEST RN 918932-71-5

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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http://www.cas.org/ONLINE/UG/regprops.html

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Documents\stnweb\Queries\34345q.str

Updated Search

L14 STRUCTURE UPLOADED

=> d 114

L14 HAS NO ANSWERS

STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s 114

SAMPLE SEARCH INITIATED 13:41:14 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 757 TO ITERATE

757 ITERATIONS 100.0% PROCESSED

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

13490 TO

PROJECTED ANSWERS:

1 TO 80

T₁1.5 1 SEA SSS SAM L14

=> s 114 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 171.65 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y FULL SEARCH INITIATED 13:41:20 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -15385 TO ITERATE

100.0% PROCESSED 15385 ITERATIONS

15 ANSWERS

SEARCH TIME: 00.00.01

L16 15 SEA SSS FUL L14

=> file caold

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

730.00 172.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

CA SUBSCRIBER PRICE

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 116

L17 0 L16

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.45 730.45

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

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ENTRY

SESSION

CA SUBSCRIBER PRICE 0.00 -3.90

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FILE COVERS 1907 - 1 Feb 2007 VOL 146 ISS 6 FILE LAST UPDATED: 31 Jan 2007 (20070131/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 116

L18 7 L16

 \Rightarrow d 118, ibib abs hitstr, 1-7

L18 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:588876 HCAPLUS

DOCUMENT NUMBER: 143:115448

TITLE: Nicotinamide derivatives preparation as opioid

receptor antagonists

INVENTOR(S): Benesh, Dana Rae; Blanco-Pillado, Maria-Jesus

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

Updated Search

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATE | NT NO. | | | KIN | D | DATE | | | | ICAT | | | | D | ATE . | |
|------------|----------|-------|------|----------|----------|------|------|-------|-------|-------|-------|----------|-----|------|-------|-----|
| WO 20 | 050614 | 142 | | A1 | - | 2005 | 0707 | | WO 2 | 004- | us38: | 227 | | 2 | 0041 | 206 |
| V | V: AE, | AG, | AL, | AM, | AT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, |
| • | CN. | co, | CR. | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | GE. | GH, | GM, | HR. | HU, | ID, | IL, | IN, | IS, | JΡ, | KE, | KG, | KP, | KR, | ΚZ, | LC, |
| | ī.K. | LR, | LS. | LT. | LU. | LV, | MA. | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NA, | NI, |
| | NO. | NZ, | OM. | PG. | PH, | PL. | PT, | RO, | RU, | sc, | SD, | SE, | SG, | SK, | SL, | SY, |
| | т.Т. | TM, | TN. | TR. | TT. | TZ. | UA. | UG. | US. | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| Ţ | RW: BW | GH. | GM. | KE. | LS. | MW. | MZ. | NA. | SD. | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| • | A7. | BY, | KG. | KZ. | MD. | RU. | TJ. | TM. | AT. | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | EE. | ES, | FT. | FR. | GB. | GR. | HU. | IE. | ıs, | IT. | LT, | LU, | MC, | NL, | PL, | PT, |
| | RO. | SE, | ST. | SK. | TR. | BF. | ВJ. | CF. | CG. | CI, | CM, | GA, | GN, | GO, | GW, | ML, |
| | | NE, | | | | J., | , | , | , | , | • | - • | • | | | • |
| 20 נומ | 004303 | 790 | J.,, | A1 | - 0 | 2005 | 0707 | | AU 2 | 004- | 3037 | 90 | | 2 | 0041 | 206 |
| CD 2 | 549009 | , , , | | Δ1 | | 2005 | 0707 | | CA 2 | 004- | 2549 | 009 | | 2 | 0041 | 206 |
| FD 1 | 597307 | | | Δ1 | | 2006 | 0906 | | EP 2 | 004- | 8110 | 79 | | 2 | 0041 | 206 |
| EF I | R: AT, | BE | СН | DE | DK | ES | FR. | GB. | GR. | TT | T.T. | T.U. | NL. | SE. | MC. | PT. |
| • | TE | SI, | T TT | EI, | BO. | CY, | TR | BG, | CZ. | EE. | HII. | PI. | SK. | TS, | , | , |
| CN 19 | 390208 | , 51, | ш, | ът, | 110, | 2007 | 0103 | . 507 | CN 2 | 004- | 8003 | 6471 | J., | 2 | 0041 | 206 |
| CN I | 07010 | 550 | | Λ 7\1 | | 2007 | 0111 | | 119 2 | 004 | 5811 | 64 | | | | |
| | | | | | | | | | 115 2 | 003- | 5290 | 61 P | | P 2 | 0031 | 212 |
| PRIORITY A | APPLN. | INFO | • • | | | | | | | 003- | | | | | | |
| OMUDD 0011 | 2011 (0) | | | MAD | ייי ע כו | 1/2. | 1151 | | WO Z | .004- | 0000 | <u> </u> | | ,, 2 | 004T | 200 |
| OTHER SOU | KCE (S) | : | | MAR | PAT | 143: | 1134 | 40 | | | | • | | | | |
| GI | | | | | | | | | | | | | | | | |

$$\bigcap_{O} \bigcap_{N} \bigcap_{N$$

Nicotinamide derivs. were prepd.for use in the treatment, prevention or amelioration of obesity and related diseases. E.g., I was prepared starting from 3,3-dimethyl-1,5-dioxaspiro[5.5]undecan-9-one through a number of reaction sequences. I and a number of other derivs. were tested with the GTP- γ -S binding assay and ex vivo receptor binding.

Ι

IT 857048-52-3P 857048-53-4P 857048-54-5P

857048-55-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(nicotinamide derivs. preparation as opioid receptor antagonists)

RN 857048-52-3 HCAPLUS

CN 3-Pyridinecarboxamide, 6-[[4-[[2-(tetrahydro-2H-pyran-4-yl)ethyl]amino]cyclohexyl]oxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 857048-53-4 HCAPLUS
CN 3-Pyridinecarboxamide, 6-[[4-[(3-methylbutyl)amino]cyclohexyl]oxy]- (9CI)
(CA INDEX NAME)

$$\begin{array}{c|c} O \\ \parallel \\ H_2N-C \\ \hline \end{array} \qquad \begin{array}{c} NH-CH_2-CH_2-CHMe_2 \\ \end{array}$$

RN 857048-54-5 HCAPLUS CN 3-Pyridinecarboxamide, 6-[[4-[[2-(2-thienyl)ethyl]amino]cyclohexyl]oxy]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & CH_2-CH_2-NH & C-NH_2 \\ \hline \end{array}$$

RN 857048-55-6 HCAPLUS
CN Benzamide, 4-[[4-[(3-phenylpropyl)amino]cyclohexyl]oxy]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$H_2N$$
 N
 O
 Ph

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

12

ACCESSION NUMBER:

2005:570983 HCAPLUS

DOCUMENT NUMBER:

143:97274

TITLE:

Preparation of piperidines as chemokine receptor, particularly CCR5, modulators for treatment of

inflammatory and autoimmune diseases

Bridger, Gary J.; Zhou, Yuanxi; Skerlj, Renato

PATENT ASSIGNEE(S):

Anormed Inc., Can. PCT Int. Appl., 384 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

INVENTOR(S):

PATENT INFORMATION:

| | PA' | TENT 1 | NO. | | | KINI |) | DATE | | i | | CAT | | | | D/ | ATE | |
|---|------------|--------|-----|------|-----|------|-------------|------|------|-----|-------|-------|------|-----|------|------|-------|-------|
| | | 2005 | | | | | | 2005 | | 7 | | | | | | 20 | 00412 | 213 |
| | WO | | | | | | | AU, | | BA. | BB. | BG. | BR. | BW. | BY. | BZ. | CA, | CH, |
| | | ** . | CN | co, | CR | CII | CZ. | DE, | DK. | DM. | DZ. | EC. | EE. | EG. | ES. | FI. | GB, | GD, |
| | | | GF, | CH, | GM, | HR. | нп. | ID, | TT. | TN. | IS. | JP. | KE. | KG. | KP. | KR. | KZ. | LC. |
| | | | TK | T.D | T.S | T.TT | T.II | LV, | MA. | MD | MG. | MK. | MN. | MW. | MX. | MZ. | NA. | NI. |
| | | | NO. | N7 | OM, | PG | DU, | PL, | PT. | RO. | RU. | SC. | SD. | SE. | SG. | SK. | SL | SY. |
| | | | TT. | TM | TNI | TO, | υψ. Г11. | TZ, | 112 | ne, | IIS | 117. | VC. | VN. | YII. | 7.A. | 2M. | 7.W |
| | | DW. | DW. | Cn, | CM | KE, | IS, | MW, | M2 | υΔ, | SD, | SI. | 52 | ΤΖ. | IIG. | 2M | 2.W. | AM. |
| | | LW. | | | | | | RU, | | | | | | | | | | |
| | | | | | | | | GR', | | | | | | | | | | |
| | | | EE, | ES, | CI, | CK, | mp, | BF, | DI | CE, | CC, | CT, | CM | CV | CN | GO, | CW, | MT. |
| | | | - | - | | | | Dr, | ьо, | Cr, | CG, | CI, | CM, | GA, | GN, | GΩ, | GM, | 1111, |
| | C P | 2548 | | NE, | | | | 2005 | 0630 | | C 7 2 | 004- | 25/0 | 303 | | 21 | 20/1 | 213 |
| | | | | | | | | | | | | | | | | | | |
| | EP | 1708 | | | | | | | | | | | | | | | | |
| | | R: | | | | | | ES, | | | | | | | | | | |
| | | | ΙE, | SI, | LT, | LV, | FΙ, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | PL, | SK, |
| | | | BA, | HR, | IS, | YU. | | | | | | | | | | | | |
| ٠ | PRIORIT | Y APP | LN. | INFO | . : | | | | | | US 2 | 003- | 5289 | 75P | 1 | P 21 | 0031 | 211 |
| | | | | | | | | | | 1 | WO 2 | 004-1 | US41 | 865 | 1 | W 2 | 0041 | 213 |
| | | | | | | | | | | | | | | | | | | |

OTHER SOURCE(S):

MARPAT 143:97274

GI

Title compds. I [wherein X = C, N; Y = O if X = C, or a bond if X = N; Z = (CH2)n; n = 0-1; R1 = (un)substituted hetero/aryl; R2 = (un)substituted hetero/aryl, N:(alkyl); R3 = (un)substituted hetero/aryl, or a Ph fused with a 5- or 6-membered heterocycle; R4 = H, alkyl; and their pharmaceutically acceptable salts] were prepared as chemokine receptor, particularly CCR5, modulators for treatment of inflammatory and autoimmune diseases. For example, coupling of 2,4-dimethyl-N-oxonicotinic acid with [3-[4-[(4-bromophenyl)phenoxymethyl]piperidin-1-yl]butyl]amine (preparation given) gave II in 82% yield. I exhibited IC50's in the range of 0.01 nM to 50 μ M in an assay for inhibition of HIV-1 using PMBC and R5. Compds. I demonstrate protective effects against infection of target cells by a human immunodeficiency virus (HIV).

IT 856937-05-8P, 4,6-Dimethylpyrimidine-5-carboxylic acid
[(R)-3-[4-[[4-(4-carbamoylphenoxy)phenyl](thien-3-ylmethyl)amino]piperidin1-yl]butyl]amide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CCR5 modulator; preparation of piperidines as chemokine receptor modulators for treatment of inflammatory and autoimmune diseases)

RN 856937-05-8 HCAPLUS

CN 5-Pyrimidinecarboxamide, N-[(3R)-3-[4-[4-[4-(aminocarbonyl)phenoxy]phenox]] (3-thienylmethyl)amino]-1-piperidinyl]butyl]-4,6-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCAPLUS COPYRIGHT 2007 ACS on STN ANSWER 3 OF 7

ACCESSION NUMBER:

2005:309175 HCAPLUS

DOCUMENT NUMBER:

143:90722

TITLE:

Metabotropic glutamate 2 receptor potentiators: receptor modulation, frequency-dependent synaptic activity, and efficacy in preclinical anxiety and

psychosis model(s)

AUTHOR(S):

Johnson, Michael P.; Barda, David; Britton, Thomas C.; Emkey, Renee; Hornback, William J.; Jagdmann, G. Erik;

McKinzie, David L.; Nisenbaum, Eric S.; Tizzano,

Joseph P.; Schoepp, Darryle D.

CORPORATE SOURCE:

Lilly Research Laboratories, Lilly Corp. Cent., Eli

Lilly and Company, IN, 46285, USA

SOURCE:

Psychopharmacology (Berlin, Germany) (2005), 179(1),

271-283

CODEN: PSCHDL; ISSN: 0033-3158

Springer GmbH

PUBLISHER:

Journal

DOCUMENT TYPE: LANGUAGE: English

To increase subtype selectivity and provide a novel means to alter receptor function, the authors discovered and characterization potentiators for the metabotropic glutamate 2 receptor (mGlu2). A class of 3-pyridylmethylsulfonamides (e.g., 3-MPPTS; 2,2,2-trifluoro-N-[3-(2methoxyphenoxy)phenyl]-N-(3-pyridinylmethyl)-ethanesulfonamide) were found to be potent, subtype-selective potentiators of human and rat mGlu2. The sulfonamides increased agonist potency in functional assays but did not displace orthosteric radiolabeled antagonist or agonist binding to cloned mGlu2 receptors. Rather, the modulators increased the affinity of most of the orthosteric agonists including glutamate, DCG-IV ((2S,2'R,3'R)-2-(2',3'-dicarboxylcyclopropyl)glycine), and LY354740 (1S,2S,5R,6S-2aminobicyclo[3.1.0]hexane-2,6-bicarboxylate monohydrate). In striatal brain slices, LY354740 inhibited evoked excitatory postsynaptic potentials (EPSPs) equally well following either a low- (0.06 Hz) or high (4 Hz)-frequency stimulation of corticostriatal afferents. In contrast, the mGlu2 potentiator cyPPTS (2,2,2-trifluoro-N-[3-(cyclopentyloxy)phenyl]-N-(3-pyridinylmethyl)-ethanesulfonamide) inhibited striatal EPSPs only at higher frequencies of stimulation (2 and 4 Hz). Several sulfonamides including 4-MPPTS, 4-APPES (N-[4-(4-carboxamidophenoxy)phenyl]-N-(3pyridinylmethyl)-ethanesulfonamide hydrochloride monohydrate), and/or

CBiPES (N-[4'-cyano-biphenyl-3-yl]-N-(3-pyridinylmethyl)-ethanesulfonamide hydrochloride) were tested in mGlu2/3 agonist-sensitive rodent model(s) of anxiety and psychosis. As seen with LY354740, both 4-MPPTS and 4-APPES were efficacious in a rat fear-potentiated startle paradigm. Likewise in mice, CBiPES attenuated a stress-induced hyperthermia and PCP-induced hyperlocomotor activity. Furthermore, CBiPES mediated alteration in PCP-induced hyperlocomotor activity was sensitive to mGlu2/3 antagonist pretreatment. Taken together, the data indicate mGlu2 receptor potentiators have a unique use-dependent effect on presynaptic glutamate release, and show efficacy in several mGlu2/3-sensitive animal models of psychiatric disorders.

IT 856702-39-1

CN

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mGlu2 receptor potentiators on presynaptic glutamate release in preclin. anxiety and psychosis models)

RN 856702-39-1 HCAPLUS

Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

REFERENCE COUNT:

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

53

ACCESSION NUMBER:

2004:267241 HCAPLUS

DOCUMENT NUMBER:

140:303538

TITLE:

Preparation of [[(aminoalkyl)aryl]oxy]nicotinamides and analogs as opioid receptor antagonist for

treatment of obesity and related conditions

INVENTOR(S):

Blanco-Pillado, Maria-Jesus; Chappell, Mark Donald; Garcia De la Torre, Marta; Diaz Buezo, Nuria; Fritz, James Erwin; Holloway, William Glen; Matt, James Edward, Jr.; Mitch, Charles Howard; Pedregal-Tercero,

Concepcion; Quimby, Steven James; Siegel, Miles Goodman; Smith, Dana Rae; Stucky, Russell Dean;

Takeuchi, Kumiko; Thomas, Elizabeth Marie; Wolfe, Chad

Nolan

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA PCT Int. Appl., 559 pp.

CODEN: PIXXD2

DOCUMENT . TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

| PA | TENT | NO. | | | KIN |) | DATE | | | APPI | LICAT | ION I | . 00 | | D | ATE | |
|---------|-------|------|------|-----|------|-----|------|------|-----|-------|-----------------|-------|------|-----|-----|------|-----|
| | | 0263 | 05 | | . A1 | | 2004 | 0401 | | WO 2 | 2003-1 | US26 | 300 | | 2 | 0030 | 917 |
| | W: | | | | | | | | | BB, | , BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | | | | | | | | | EE, | | | | | | |
| | | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | , KE, | KG, | ΚP, | KR, | KΖ, | LC, | LK, |
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| | | TN, | TR, | TT, | ΤZ, | UA, | UG, | US, | UZ, | VC, | , ·VN, | YU, | ZA, | ZM, | ZW | | |
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| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | , GW, | ML, | MR, | ΝE, | SN, | TD, | TG |
| CA | 2499 | 690 | | | A1 | | 2004 | 0401 | | CA 2 | 2003- | 2499 | 690 | | 2 | 0030 | 917 |
| AU | 2003 | 2699 | 80 | | A1 | | 2004 | 0408 | | AU 2 | 2003-: 2003- | 2699 | 80 | | 2 | 0030 | 917 |
| BR | 2003 | 0143 | 80 | | À | | 2005 | 0705 | | BR 2 | 2003- | 1430 | 8 | | 2 | 0030 | 917 |
| EP | | | | | | | | | | | 2003- | | | | | | |
| | R: | | | | | | | | | | , IT, | | | | | | |
| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL | , TR, | BG, | CZ, | EE, | HU, | SK | |
| CN | 1681 | 498 | • | | . A | | 2005 | 1012 | | CN 2 | 2003- | 8222 | 41 | | 2 | 0030 | 917 |
| JP | 2006 | 5114 | 74 | | Т | | 2006 | 0406 | | JP : | 2004- | 5376 | 82 | | 2 | 0030 | 917 |
| US | 2006 | 2173 | 72 | | A1 | | 2006 | 0928 | | US : | 2005- 2005- | 5269 | 60 | | 2 | 0050 | 303 |
| IN | 2005 | KN00 | 457 | | Α | | 2006 | 0303 | | IN: | 2005- | KN45 | 7 | | 2 | 0050 | 318 |
| | 2005 | | | | | | 2005 | 0418 | | NO 2 | 2005- 2002- | 1871 | | | 2 | 0050 | 418 |
| PRIORIT | Y APP | LN. | INFO | . : | | | | • | | | | | | | | | |
| | | | | | | | | | | WO : | 2003- | US26 | 300 | 1 | w 2 | 0030 | 917 |
| OTHER S | OURCE | (S): | | | MAR | PAT | 140: | 3035 | 38 | | | | | | | | |

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$$N_H$$
 N_{H} N_{H2} N_{H2}

AB Title diaryl ethers I [wherein X1-X10 = independently C, CH, or N; provided that each of rings A or B has no more than 2 N atoms; E = O or

Ι

NH; R1 and R2 = independently H or (un) substituted (cyclo) alkyl, alkenyl, alkynyl, (alkyl)aryl, (aryl)heterocyclyl, (cyclo)alkylheterocyclyl, (cyclo)alkanoylalkyl, aroylalkyl, aryloxyalkyl, benzhydryl, bicyclyl(alkyl), benzoyl(alkyl), alkoxyalkyl, alkoxycarbonyl, (aryl)alkylsulfonyl, heterocyclylalkylsulfonyl, cycloalkylalkyl, carboxyalkyl, carbamoylalkyl, etc.; R3 and R3' = independently H, alkyl, alkenyl, alkynyl, (alkyl)aryl, or alkylcycloalkyl; R4 and R5 = independently H, (halo)alkyl, alkenyl, alkynyl, alkoxy(halo)alkyl, thioalkyl, halo, aryl(alkyl), alkanoyl, alkoxycarbonyl, aminoalkyl, cycloalkylalkyl, etc.; R6 and R7 = independently H, (cyclo)alkyl, alkenyl, alkynyl, alkanoyl, OH, alkoxy, (aryl)alkylsulfonyl, heterocyclylalkylsulfonyl, aryl(alkyl), carbamoyl(alkyl), etc.; m = 1-3; n = 0-3; p = 0-3; or pharmaceutically acceptable salts, solvates, enantiomers, racemates, diastereomers, or mixts. thereof] were prepared as μ -, κ -, and δ -opioid receptor antagonists. For example, reductive amination of 6-(2-fluoro-4-formylphenoxy)nicotinamide and 3-methylbutylamine provided II (99%). The latter inhibited ex vivo binding of [3H]-diprenorphine in rat striatum/nucleus accumbens by >65% at a concentration of 7 mg/kg. In an acute feeding rat obesity assay, II suppressed

opioid receptors at a dose of 0.3 $\mu g/kg$. In addition, diet-induced obese rats achieved an energy balance (caloric intake minus utilization) of -81 kcal/kg/day upon administration of 0.3 mg/kg p.o. of II in an indirect calorimetry assay. Thus, I and their pharmaceutical compns. are useful for the treatment, prevention, or amelioration of obesity and related diseases.

IT 676495-22-0P, 4-[4-(3-Phenylpropylamino)phenoxy]benzamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(opioid receptor antagonist; preparation of (aryloxy) nicotinamides and analogs as opioid receptor antagonist for treatment of obesity and related conditions)

RN 676495-22-0 HCAPLUS

CN Benzamide, 4-[4-[(3-phenylpropyl)amino]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:17852 HCAPLUS

DOCUMENT NUMBER:

140:71038

TITLE:

Pharmaceutical compositions containing aliphatic

N-containing 5-membered compounds as

dipeptidylpeptidase IV (DPPIV) inhibitors

INVENTOR(S):

Yasuda, Kosuke; Morimoto, Keiji; Kanan, Saburo; Hikota, Masaki; Matsumoto, Takeshi; Arakawa, Kenji

PATENT ASSIGNEE(S):

Tanabe Seiyaku Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 129 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

GΙ

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|--------------------------------------|--------|-----------|----------------------------------|--------|----------|
| JP 2004002367 PRIORITY APPLN. INFO.: | Α | 20040108 | JP 2003-101361 JP 2002-102757 | - А | 20030404 |
| OTHER SOURCE(S): | MARPAT | 140:71038 | | | |

Ι

The compns., useful for prevention and treatment of type 2 diabetes, contain the compds. I [A = CH2, S; R1 = H, lower alkyl, hydroxyalkyl, alkoxyalkyl; R2 = (un)substituted mono-, di-, or tricyclic hydrocarbyl, heterocyclyl, (un)substituted amino] or their salts. I.HCl (A = CH2, R1 = H, R2 = NMe2) in vitro inhibited human blood serum DPPIV with IC50 of 3 nM.

IT 412286-40-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aliphatic N-containing 5-membered compds. as dipeptidylpeptidase IV inhibitors)

RN 412286-40-9 HCAPLUS

CN 3-Pyridinecarboxamide, 6-[[cis-4-[[2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethyl]amino]-4-methylcyclohexyl]oxy]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L18 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

2002:293616 HCAPLUS ACCESSION . NUMBER:

DOCUMENT NUMBER:

136:325560

TITLE:

Preparation of aliphatic nitrogenous five-membered ring compounds as dipeptidyl peptidase IV inhibitors Yasuda, Kosuke; Morimoto, Hiroshi; Kawanami, Saburo; Hikota, Masataka; Matsumoto, Takeshi; Arakawa, Kenji

Tanabe Seiyaku Co., Ltd., Japan

PATENT ASSIGNEE(S):

PCT Int. Appl., 164 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

Japanese ·

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | CENT 1 | 10. | | | KIND |) | DATE | • | | APP | LICAT | ION | NO. | |] | DATE | |
|----------|----------------------------------|-------|---------|-----|-----------|-----|--------------|-------------|-----|-----------|---|-------------|-----------|-----|-----------|-------------------------|-------|
| WO | 20020 W: | AE, | AG, | AL, | A1 AU, | BA, | 2002 BB, | 0418 BG, | BR, | WO BZ | 2001- , CA, , IN, | JP88 CN, | 03 CO, | CR, | CU. | 20011 , CZ, , LR, | DM, |
| | | LV, | MA, | MG, | MK, | MN, | MX, | NO, | NZ, | PH | , PL, | RO, | SG, | SI, | SK | , TT, | UA, |
| | | US, | UZ, | VN, | YU, | ZA, | AM, | AZ, | BY, | KG | , KZ, | MD, | RU, | TJ, | TM | CII | CV |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | 52 | , TZ, | UG, | ZiW., | AT, | BE, | , CH, | CI, |
| | | DE, | DK, | ES, | rı, | CM | GB, | GK, | LE, | CM T I | , LU, , ML, | MD, | NE, | SM | TLD TE | , 1Κ, ΤG | ъг, |
| זו ת | 20010 | 80, | CF, | CG, | Δ, | CM, | 2002 | 0N, | ĠQ, | ΔII | 2001- | 9419 | 7 | JN, | 10 | 20011 | 005 |
| OA OT | 20019 | 3561° | , 71 | | Δ | | 2002 | 1213 | | JP. | 2001- | 3095 | 58 | | | 20011 | 005 |
| .TD | 20023 | 3564 | 72 . | | Δ | | 2002 | 1213 | | JP | 2001- | 3095 | 59 | | | 20011 | 005 |
| CA | 24246 | 500 | 12. | | A1 | | 2003 | 0402 | | CA | 2001- | 2424 | 600 | | | 20011 | 005 |
| BR | 20010 | 1144 | 36 | | A | | 2003 | 0701 | | BR | 2001- | 1443 | 6 | | | 20011 | 005 |
| EP | 20023 24246 20010 13259 | 910 | • | | A1 | | 2003 | 0709 | | ΕP | 2001- | 9747 | 17 | | | 20011 | 005 . |
| | R: | AT, | BE, | CH, | DE, | DK, | , ES, | FR, | GB, | GR | , IT, | LI, | LU, | NL, | SE | , MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | , RO, | MK, | CY, | ΑL | , TR | | ' | | | | |
| CN | 14682 | 216 | | | A | | 2004 | 0114 | • | CN | 2001- | 8166 | 74 | | | 20011 | 005 |
| HU | 20030 | | | | | | | | | HU | 2003- | 3391 | | | • | 20011 | 005 |
| NZ | 5249 | 74 | | | Α | | 2005 | 1028 | | ΝZ | 2003- 2001- 2006- 2003- 2003- 2003- 2003- | -5249 | 74 | | | 20011 | 005 |
| CN | 1891 2003 2003 2003 | 589 | | | Α | | 2007 | 0110 | | CN | 2006- | 1007 | 7863 | | | 20011 | 005 |
| IN | 20031 | KN00 | 303 | | A | | 2005 | 0311 | | IN | 2003- | -KN30 | 3 | | | 20030 | 312 |
| ZA | 2003 | 0020 | 30 | | A | | 2003 | 0926 | | ZA | 2003- | 2030 | | | | 20030 | 313 |
| | | | | | A | | 2003 | 0602 | | NO | 2003- | 1490 | 0.0 | | | 20030 | 402 |
| | 20040 | | | | A1 | | | | | US | 2003- | -3984 | 86 | | | 20030 | 404 |
| | 6849 | | 7.4 | | B2 | | 2005 2004 | | | TD | 2002 | 2605 | 72 | | | 20031 | 029 |
| | 20040 | | 74 | | A | | 2004 | | | UP | 2003- 2004- | -2002 | 12 | | | 20031 | 622 |
| | 20042 71608 | | 20 | | A1 B2 | | 2004 | | | U.S | 2004- | 0/24 | 42 | | | 20040 | 022 |
| | 20042 | - | 82 | | A1 | | 2005 | 0109 | | ΠΔ | 2004- | -2378 | 82 | | | 20041 | 213 |
| | 20052 | | | | A | | 2005 | | | JP | 2005- | -1057 | 32 | | | 20050 | |
| | Y APP | | | | 21 | | 2005 | 0,20 | | | 2000- | | | | | 20001 | |
| 101111 | 1 | | 11110 | • • | | | | | | | 2000- | | | | | 20001 | |
| | | | | | | | | | | | 2001- | | | | | 20010 | |
| | | | | | | | | | | CN | 2001- | -8166 | 74 | | | 20011 | |
| | | | | | | | | | | JP | 2001- | -3095 | 58 | | A3 | 20011 | 005 |
| | | | | | | | | | | | 2001- | | | | | 20011 | |
| | | | | | | | | | | | 2001- | | | | | 20011 | |
| | | | | | | | | | | US | 2003- | -3984 | 86 | | A3 | 20030 | 404 |
| | | | | | | | 406 | 2055 | ~ ^ | | _ | | | | | | |

OTHER SOURCE(S):

MARPAT 136:325560

GI

Ρ

$$R^2 - X - NHCH_2CO - N$$
 NC

Aliphatic nitrogenous five-membered ring compds., (S)-N-(N-AB cyclohexylglycyl)pyrrolidine-2-carbonitrile and (R)-N-(Ncyclohexylglycyl)thiazolidine-2-carbonitrile, of the general formula (I) or pharmacol. acceptable salts thereof [wherein A is CH2 or S; R1 is hydrogen, lower alkyl, hydroxy-lower alkyl, or lower alkoxy-lower alkyl; Xis N(R3), O, or CO; R3 is hydrogen or lower alkyl; and R2 is an optionally substituted mono- or bicyclic hydrocarbyl or heterocyclyl group or optionally substituted amino] are prepared These compds. are useful as dipeptidyl peptidase IV inhibitors for the prevention or treatment of diabetes, in particular type II diabetes (no data). Thus, a solution of (S)-1-bromoacetyl-2-cyanopyrrolidine and N-(5-nitro-2-pyridyl)-trans-1,4cyclohexanediamine in MeOH/MeCN was stirred at room temperature for 15 h to give, after treatment with 2 N HC1/Et20 in EtOAc/CHC13, (S)-2-cyano-1-[[[trans-4-(5-nitro-2-pyridylamino)cyclohexyl]amino]acetyl]p yrrolidine dihydrochloride. IT 412286-40-9P

Ι

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (S)-N-(N-cyclohexylglycyl)pyrrolidine-2-carbonitriles and (R)-N-(N-cyclohexylglycyl)thiazolidine-2-carbonitriles as dipeptidyl peptidase IV inhibitors for prevention or treatment of diabetes)

412286-40-9 HCAPLUS

3-Pyridinecarboxamide, 6-[[cis-4-[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-4-methylcyclohexyl]oxy]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

CN

HCl

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:581845 HCAPLUS

Updated Search

DOCUMENT NUMBER:

135:152723

TITLE:

Preparation of N-phenyl-N-

alkylsulfonyl(pyridylmethyl)amines as potentiators of

glutamate receptors

INVENTOR(S):

Coleman, Darrell Stephen; Jagdmann, Gunnar Erik Junior; Johnson, Kirk Willis; Johnson, Michael Parvin; Large, Thomas Hallett; Monn, James Allen; Schoepp, Darryle Darwin; Tizzano, Joseph Patrick; Barda, David Anthony; Britton, Thomas Charles; Dressman, Bruce Anthony; Fichtner, Michael William; Henry, Steven

Scott; Hornback, William Joseph

· PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA

PCT Int. Appl., 247 pp.

CODEN: PIXXD2

DOCUMENT TYPE: -

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | TENT | NO. | | | KIN |) | DATE | | 1 | APPL | ICAT: | ION I | NO. | | D | ATE | |
|-----|--------------|---|---|---|---|---|---|---|--|--|--|---|---------------------------------|---|---|---|--------------------------|
| | 2001 2001 | | | | | | | | 1 | WO 2 | 001- | JS64 | 3 | | 2 | 0010 | 122 |
| ,,, | W: | AE, CR, HU, LU, SD, YU, CI, GH, DE, | AG, CU, ID, LV, SE, ZA, CM, GM, DK, | AL, CZ, IL, MA, SG, ZW, GA, KE, ES, | AM, DE, IN, MD, SI, SZ, GN, LS, FI, | AT, DK, IS, MG, SK, BE, GW, MW, FR, | AU, DM, JP, MK, SL, CY, ML, MZ, GB, | AZ, DZ, KE, MN, TJ, FR, MR, SD, GR, | EE, KG, MW, TM, GR, NE, SL, IE, | ES, KP, MX, TR, IE, SN, SZ, IT, | FI, KR, MZ, TT, IT, TD, TZ, LU, | GB, KZ, NO, TZ, MC, TG UG, MC, | GD, LC, NZ, UA, NL, | GE, LK, PL, UG, BF, AT, PT, | GH, LR, PT, US, BJ, BE, SE, | GM, LS, RO, UZ, CF, CH, TR, | LT, RU, VN, CG, |
| US | 2004 6800 | 735 AT, IE, 0061 651 | BE, SI, 14 | CH, LT, | A2 DE, LV, A1 B2 | DK, FI, | ES, RO, 2004 | 1113 FR, MK, 0108 | GB, CY, | EP 2 GR, AL, US 2 US 2 US 2 | 001- IT, TR 002- 000- | 9065; LI, 1829 1800 1800 | 21 LU, | NL, | 2 SE, 2 P 2 P 2 | 0010 | PT, 120 203 203 |
| | | | | | | | | | | | | | | | | | |

MARPAT 135:152723 OTHER SOURCE(S):

GΙ

$$R6$$
 $R1$
 $R2$
 $R1$

$$\bigcap_{N}\bigcap_{O_2S}\bigcap_{CF_3}O_{OMe}$$

The title compds. [I; R1 = COR3, CO2R4, SO2R5 (wherein R3 = alkyl, AB cycloalkyl; R4 = alkyl, cycloalkyl; R5 = alkyl, cycloalkyl, fluorinated alkyl); R2 = H, OH, alkyl, etc.; or two R2 are taken together, on adjacent position, to form a fused cycloalkyl or methylenedioxy ring; R6 = H, alkyl, alkoxy, etc.; X = a bond, CH2, (CH2)2, CH(alkyl); Y = a bond, CH2, (CH2)2, etc.] and their pharmaceutically acceptable salts which are potentiators of metabotropic glutamate receptor function, in particular mGlu2 and/or mGlu3 receptors, and therefore useful in treating migraine, anxiety, epilepsy and schizophrenia, were prepared and formulated. reductive alkylation of 3-(2-methoxyphenoxy)aniline (preparation given) with pyridine-3-carboxaldehyde in the presence of NaBH4 followed by alkylation of the resulting N-[3-(2-methoxyphenoxy)phenyl]pyrid-3-methylamine with F3CCH2SO2Cl afforded the amine II which showed to act at a site other than the glutamate recognition site to potentiate the effects of glutamate at mGlu receptors (data given).

IT 353233-13-3P 353234-76-1P 353235-43-5P

353235-49-1P 353237-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-phenyl-N-alkylsulfonyl(pyridylmethyl)amines as potentiators of glutamate receptors)

RN 353233-13-3 HCAPLUS

CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-, hydrochloride (10:11) (9CI) (CA INDEX NAME)

●11/10 HCl

RN 353234-76-1 HCAPLUS

CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-3-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 353235-43-5 HCAPLUS

CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]- (9CI) (CA INDEX NAME)

RN 353235-49-1 HCAPLUS

CN Benzamide, 4-[4-[(ethylsulfonyl)(3-pyridinylmethyl)amino]phenoxy]-3-fluoro-

Updated Search

(9CI) (CA INDEX NAME)

RN 353237-68-0 HCAPLUS
CN Benzamide, 3-fluoro-4-[4-[(3-pyridinylmethyl)] (2,2,2-trifluoroethyl)sulfonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

$$O = S - CH_2 - CF_3$$

$$N - CH_2 - N$$

$$N - CH_2 - N$$